

REMARKS

The Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-9, 15-16, and 21-27 are pending. Claims 10-14 and 17-20 were previously cancelled. Claims 1 and 21 have been amended, and claims 24-27 have been added. Claims 1 and 21 are independent. The Examiner is respectfully requested to reconsider the rejections in view of the amendments and remarks set forth herein.

Reasons for Entry of Amendments

At the outset, it is respectfully requested that this Amendment be entered into the Official File in view of the fact that the amendments to the claims automatically place the application in condition for allowance.

In the alternative, if the Examiner does not agree that this application is in condition for allowance, it is respectfully requested that this Amendment be entered for the purpose of appeal. This Amendment was not presented at an earlier date in view of the fact that the Examiner has just now presented new grounds for rejection in this Final Office Action.

Rejection Under 35 U.S.C. §103(a)

Claims 1-9, 15,16, and 21-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Evans et al. (U.S. 6,775,647). This rejection is respectfully traversed.

Arguments Regarding Independent Claims 1 and 21

While not conceding the appropriateness of the Examiner's rejection, but merely to advance the prosecution of the present invention, independent claim 1 has been amended to recite a combination of elements directed to apparatus for estimating a manufacturing cost for a product, including *inter alia*

a first external input device capable of communicating with the cost calculation processor, and operable by a first external supplier to independently supply initial and updated cost data to the cost calculation processor;

a second external input device capable of communicating with the cost calculation processor, and operable by a second external supplier to independently supply initial and updated cost data to the cost calculation processor;

the cost calculation processor being adapted to recalculate the manufacturing cost each time updated cost factor data is supplied by each of the first and second external suppliers; and

a display device adapted to simultaneously display revised calculated manufacturing costs for both of the first and second external suppliers each time either one or both of the first and second external suppliers supplies the initial or the updated cost data at the multiple stages of design, so that a user can determine which of the first and second external suppliers is better at each of the multiple stages of design.

In addition, independent claim 21 has been amended to recite a combination of elements directed to apparatus for estimating a manufacturing cost for a product, including *inter alia*

said first display device being adapted to simultaneously display revised cost factor data for all of the at least two external suppliers each time either one or more of the at least two external suppliers independently supplies the initial or the updated cost factor data using the separate input devices, and each time alternative physical characteristics of the product to be manufactured are inputted using the first input device.

Support for the combination of elements set forth in each of claims 1 and 21 can be found in the specification, for example, in paragraphs [0037] to [0040] and [0047] to [0049]. See also FIG. 6 which clearly shows “a display device for simultaneously displaying the revised calculated manufacturing costs (c1, c2, c3) at the multiple stages of design (original design, after change a1, after change a2) for the at least two external suppliers (MA, MB), each time one or both of the at least two external suppliers (MA, MB) supplies updated cost factor data”.

Applicants respectfully submit that the combination of elements as set forth in each of independent claims 1 and 21 is not disclosed or made obvious by the prior art of record, including Evans et al.

As best understood by the Applicants, nowhere in Evans et al. is there any hint that the Evans et al. apparatus includes the cost calculation processor being adapted to recalculate the manufacturing cost based on updated cost factor data supplied by each of the at least two

external suppliers at multiple stages of design, as set forth in independent claims 1 and 21 as amended herein.

For example, Evans et al. FIG. 2 (Step 33) and column 4, line, 57-58 merely disclose "...a cost estimate is calculated for each manufacturing operation using analytical tools..."

The Applicants can find no evidence that the Evans et al. document discloses a cost calculator adapted to "recalculate the manufacturing cost based on updated cost factor data" or to "recalculate the manufacturing cost based on updated cost factor data supplied by each of the at least two external suppliers", as set forth in each of independent claims 1 and 21.

In the present invention, calculated manufacturing costs of one manufacturer are shown simultaneously with calculated manufacturing costs of the others of the at least two manufacturers. Thus, a visual comparison of "like items" (calculated manufacturing costs) can easily be made. As best understood by the Applicants, the Evans et al. device does not provide for such a comparison.

The present invention was conceived and reduced to practice in order to accommodate the challenges of an iterative design and iterative cost estimating process involving multiple design changes and multiple initial and updated cost estimates being provided by multiple suppliers. The present invention provides a novel solution to these challenges by providing for the first time a device which simultaneously displays the manufacturing costs or the recalculated manufacturing costs for the one or more stages of design for the at least two of the external suppliers, so that a user can determine which of the

JMS/CTT/tg

multiple suppliers is better at each of the stages of design. With the present invention, a user is able to simultaneously review and compare manufacturing costs of different manufacturers, and to observe simultaneously on one display how these comparative costs change relative to one another, at different design stages and as the different manufacturers update their manufacturing cost data.

At least for the reasons explained above, Applicants respectfully submit that the combination of elements as set forth in each of independent claim 1 and 21 is not disclosed or made obvious by the prior art of record, including Evans et al.

Therefore, independent claims 1 and 21 are in condition for allowance.

Dependent Claims

The Examiner is advised that dependent claims 24 to 27 have been added to set forth additional novel features of the present invention.

All dependent claims are in condition for allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) are respectfully requested.

Application No.: 09/891,367
Reply dated: August 14, 2007
Reply to Office Action of May 14, 2007

Docket No.: 0505-0840P
Art Unit: 3627
Page 15 of 15

CONCLUSION

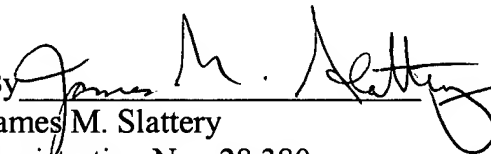
All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. It is believed that a full and complete response has been made to the outstanding Office Action, and that the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone Carl T. Thomsen (Reg. No. 50,786) at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Dated: August 14, 2007

Respectfully submitted,

By 
James M. Slattery
Registration No.: 28,380
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Rd
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant

JMS/CTT/tg 

JMS/CTT/tg